



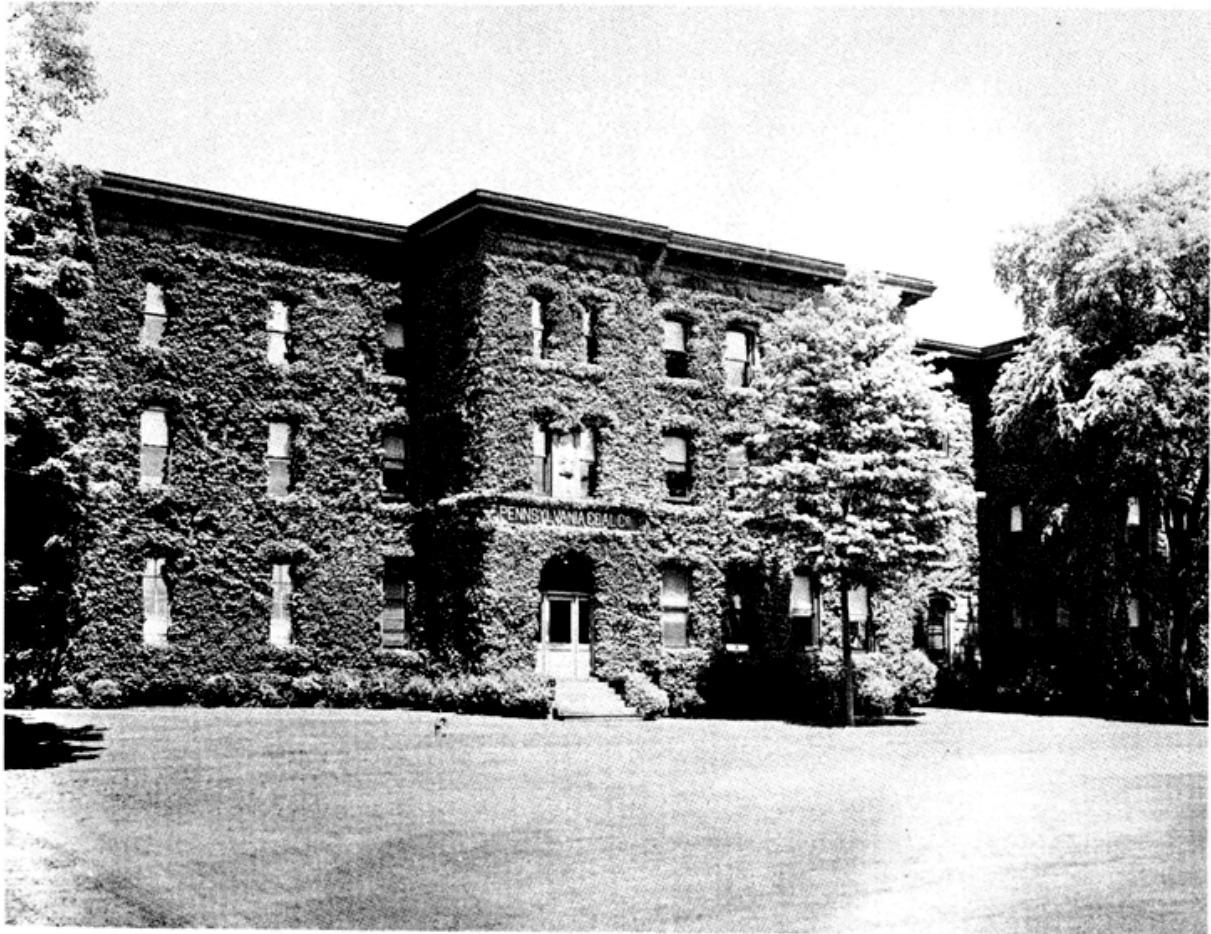
A Symbol of Strength and Tradition

Standing before the entrance of the Pennsylvania Coal Company at Dunmore is the largest single piece of anthracite ever brought to the surface of the earth.

The Pennsylvania Story



PENNSYLVANIA COAL COMPANY
DUNMORE, PENNSYLVANIA



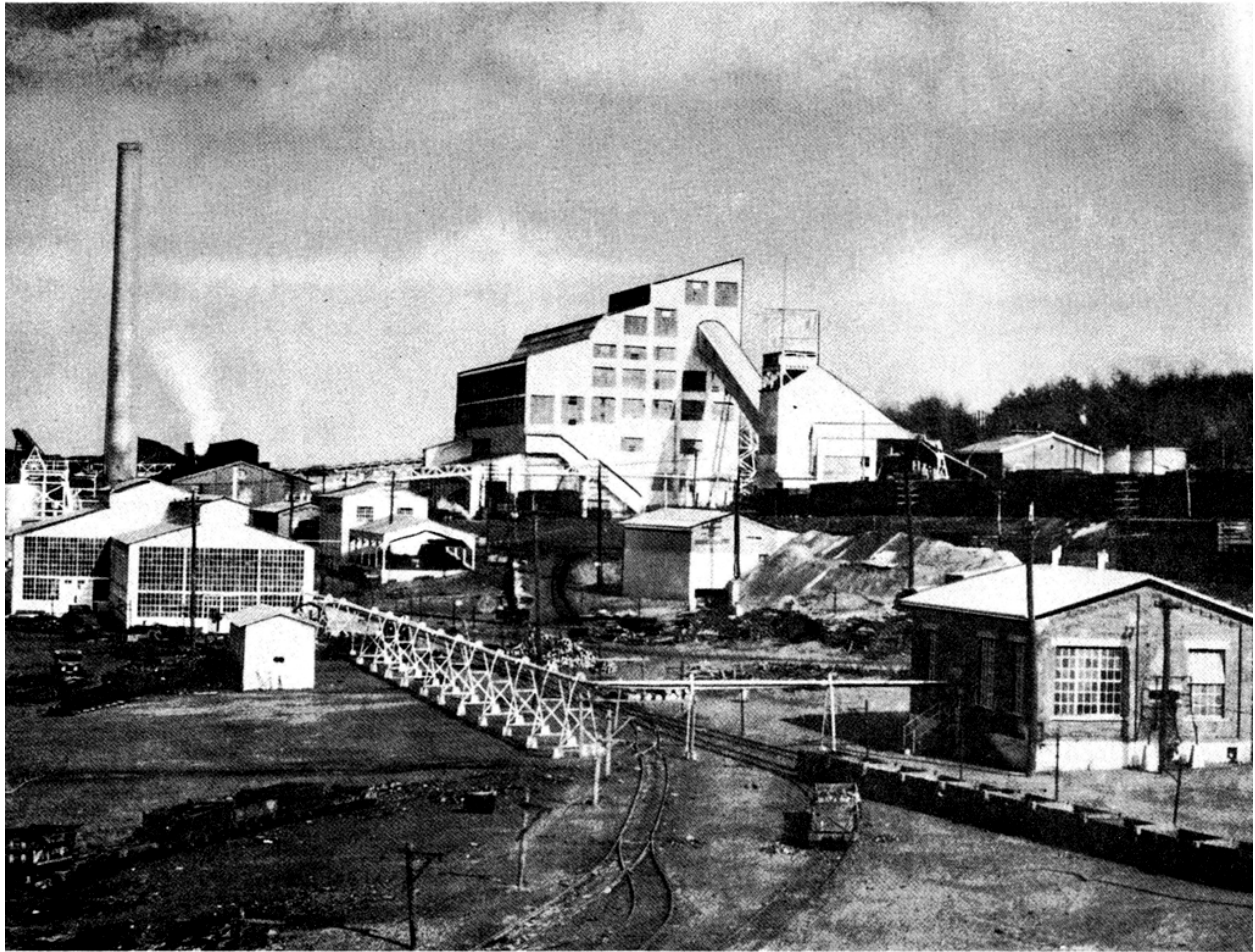
The Main Offices of the Pennsylvania Coal Company, Dunmore, Pennsylvania.

Much has been written about coal in the past — much will be written in the future — for the wonder of coal will never fail to fascinate even the most phlegmatic of men. Perhaps no other single gift of nature is so replete with the romance of the ages, so abundantly alive with the human interest of man's incessant struggle for survival, preservation, and progress. Indeed, coal actually so far predates man himself that the imagination staggers at the eons of time that had elapsed before man — yes, before any form of land animal appeared on the face of the earth.

Down the dim corridors of time, beyond the memory of anyone but God, Himself, the land that forms the eastern part of the United States was just at sea level and was completely covered by a forested swamp. The terrain was dense to the point of impenetrability. There were no seasons. There were no flowers. Trees and rushes grew in superabundance. The torrid temperature and high humidity produced plant life of prodigious proportions. As a result of this rapid growth, the trees were very porous and, after reaching quick maturity, tumbled down, adding to the mass of vegetal debris that formed the soil. Still, nothing was lost. For Nature wastes nothing, even when she seems to squander with reckless abandon the products of her own creation. For instance, witness during prehistoric times those periods of amazing fecundity when the land fairly teemed with life only to be followed by periods when volcanic forces, seemingly bent on destroying the life that had arisen, poured measureless masses of molten lava over the face of the earth. For then it was that the land was submerged in seas of sterility that swept away every vestige of life. But there is an inscrutable workmanship behind this mighty cosmic design, and an almost divine economy. For from this same warfare of Nature against herself we can now read the irrefutable truth written on the timeless scroll of the Lackawanna and Wyoming Valley that despite all these phenomenal gyrations, Nature was forging and storing for mankind one of its greatest gifts — the miracle of coal.

ANTHRACITE — NATURE'S FREAK

Anthracite is, in a sense, as much a freak of nature as is a diamond or a plant that eats insects. All three actually are the result of Nature carrying out her plan to an extreme. In the specific case of anthracite, we know that it is the result of a "wrinkling up" process that occurred millions of years ago in the bowels of the earth. It was by the formation of one of these "wrinkles" along the eastern part of this continent that clean, smokeless hard coal was formed. Just as you squeeze the water out of a rag, just so the effects of this convulsion extending from Newfoundland to Alabama occurred as the result of the great heat generated.



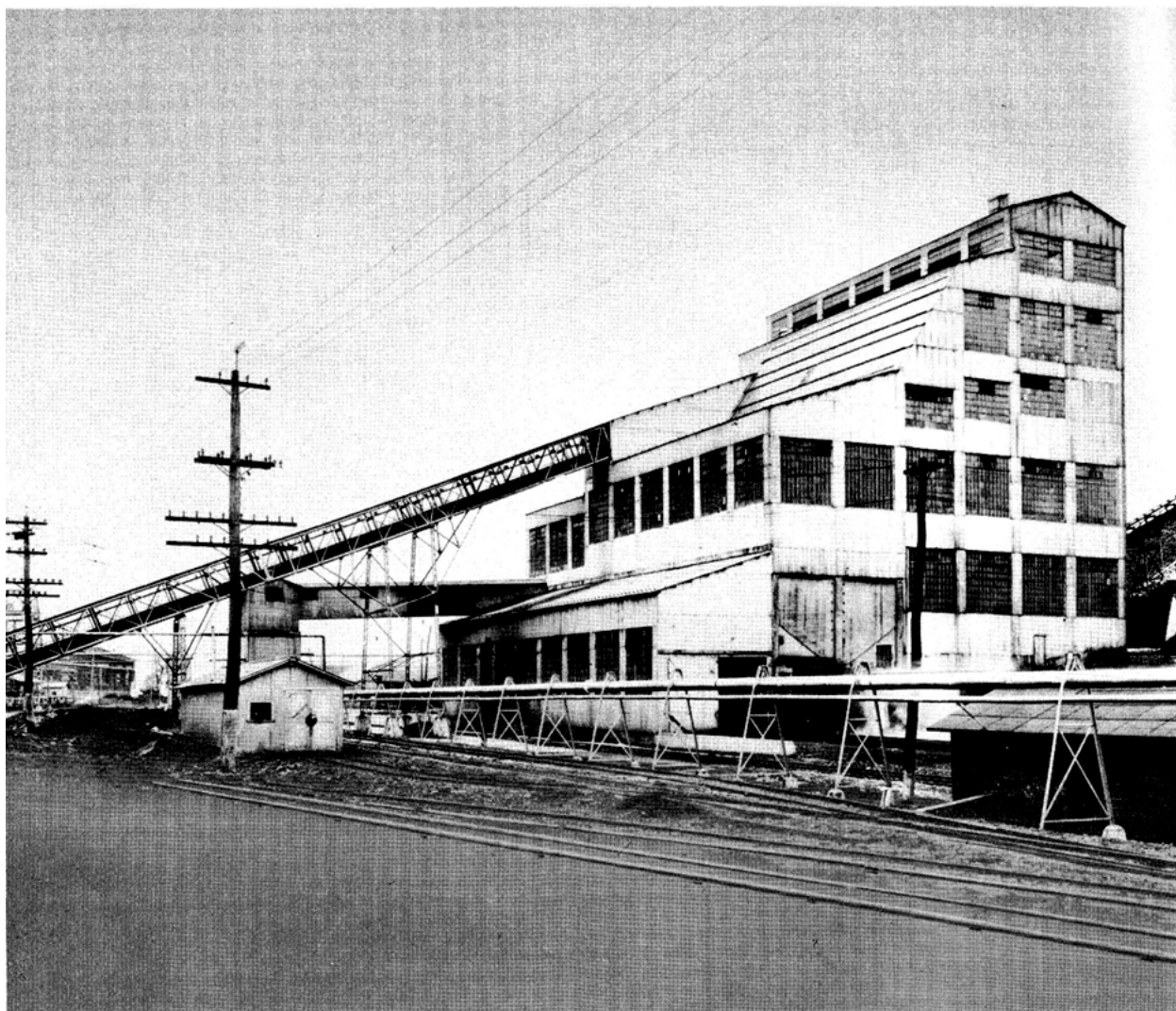
Underwood Colliery in the Borough of Olyphant near Scranton, Pennsylvania. The building of this plant started in 1910 and production started on April 28, 1914.

All extraneous matter was purged out of coal in that small area of what is now eastern Pennsylvania, and transformed into anthracite. Consequently, hard coal is almost pure carbon. That's why it burns so steadily and evenly — why it holds its heat within the fire box in the process of combustion instead of wasting it as hot gases up the stack, and finally, why anthracite cannot, no matter how or where you burn it, create smoke and soot.

THE EARLY HISTORY OF ANTHRACITE OPERATIONS

The fuel content of northeastern Pennsylvania was known to men long before its intrinsic value was suspected by the wiser ones. It can be shown that the American Indians knew that it would burn and, as early as 1710, used it. But there is no available record on the part of any white man until 52 years later. It would seem from the records that coal was discovered in Wyoming, Luzerne, and Schuylkill regions at various dates. The first on record is that of a man named Terry of a group of Connecticut settlers in the Wyoming Valley, who found anthracite on the banks of the Susquehanna River near the present site of Wilkes-Barre. Four years later James Tilghman of Philadelphia reported finding what is probably the same bed of coal, and sent a small sample to William Penn who was then in London, with the prophetic remark that, "This bed of coal, situated as it is on the side of the river, may some day or other be a thing of great value."

The existence of anthracite at Carbondale was known in 1799. But these discoveries received little attention, and few to whom they were known suspected their real significance. Furthermore, it was doubted whether anthracite could successfully be burned as a fuel, although it had been used at the Government Arsenal at Carlisle to manufacture arms for Revolutionary soldiers. We know this because in 1776 two Durham boats, which had been sent to Wyoming, were loaded with coal at Mule Creek, a few miles below the mouth of the Lackawanna River and floated down the Susquehanna to Harrisburg where the coal was unloaded and carried in wagons to the Arsenal. As far as we know this is the first recorded shipment and the first known industrial use. Ostensibly it made little impression, for in 1800 William Morris was unable to sell a wagonload which he had taken to Philadelphia. In 1808 Judge Jesse Fell, who doubled in brass as a Wilkes-Barre tavern keeper, successfully burned anthracite in a grate. He stated that he had succeeded in burning "the common stone coal of the valley" in a grate, in a common fire place, and had found that it would serve as fuel, making a cleaner, better fire at less cost than wood.



Ewen Breaker was built in 1915 replacing the first plant that was built in 1886 and destroyed by fire in 1914. It is located in Jenkins Township, Luzerne County, Pennsylvania.

COAL GETS A COLD RECEPTION IN PHILADELPHIA

In 1812, Colonel Shoemaker of Pottsville hauled 9 wagonloads of anthracite to Philadelphia, sold only 2, and gave the balance away. He narrowly escaped arrest on the charge of attempting to sell for fuel something entirely worthless. This enterprise cost at the rate of about \$28.00 per ton, but was successful in an other than monetary way. For, a wagonload was sold to a firm who operated a wire works at the falls of Schuylkill. But had it not been for one of those lucky accidents, it would have again failed here. It seems that a whole night was spent to make the coal burn and, in despair, the workmen abandoned the endeavour, but neglected to leave the door to the furnace closed. Fortunately, one workman who had forgotten his jacket returned to recover it and found an excellent fire in a red hot furnace. The instances in which anthracite was tried and failed are legion, but little by little it did "catch on." It was not until 1824 that the turning point in the use of anthracite came about, and the prejudices against it began to disappear. Strangely enough, the two problems that confronted the Pennsylvania Coal Company then are practically the same ones that the Company faces today, namely, to further develop an efficient and cheap way to deliver anthracite to market, and to educate potential and actual users in its economy and efficiency as a fuel.

COAL BY RAIL AND THE GRAVITY RAILROAD

It was clear that the early waterway method of transporting coal was not satisfactory because of the time element, the risks involved, and the actual waste of transportation materials. For, during this period it was shipped down the river in square flat boats or arks, each about 25 feet in length and from 16 to 18 feet in width. They were steered by long oars. Usually these boats made only one trip for when the coal reached its destination, they were broken up and sold for old lumber. The ark pilots or boatmen usually walked back from the point of delivery, a distance of from 80 to 100 miles. It was evident that the solution to the problem lay in rail transportation.

And the answer was the Gravity Railroad.

THE GRAVITY RAILROAD

The Gravity Railroad of the Pennsylvania Coal Company was built under a charter secured in 1838. It started at Port Griffith on the Susquehanna River and ended at the Lackawaxen River at Hawley. Here the coal shipped from the many areas was transferred to canal boats. The first shipment of coal over the Gravity Railroad was in May of 1850, and when navigation was closed that year a total of 111,114

VIEWS OF THE "OLD GRAVITY" RAILROAD



The "Pioneer" on a scheduled run.



Photo shows the length of some of the trains.

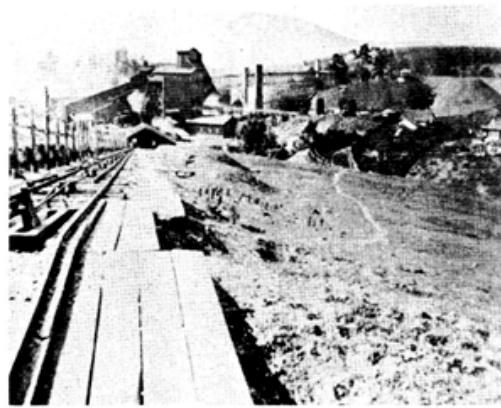


Photo shows two of the lifts from the breaker.

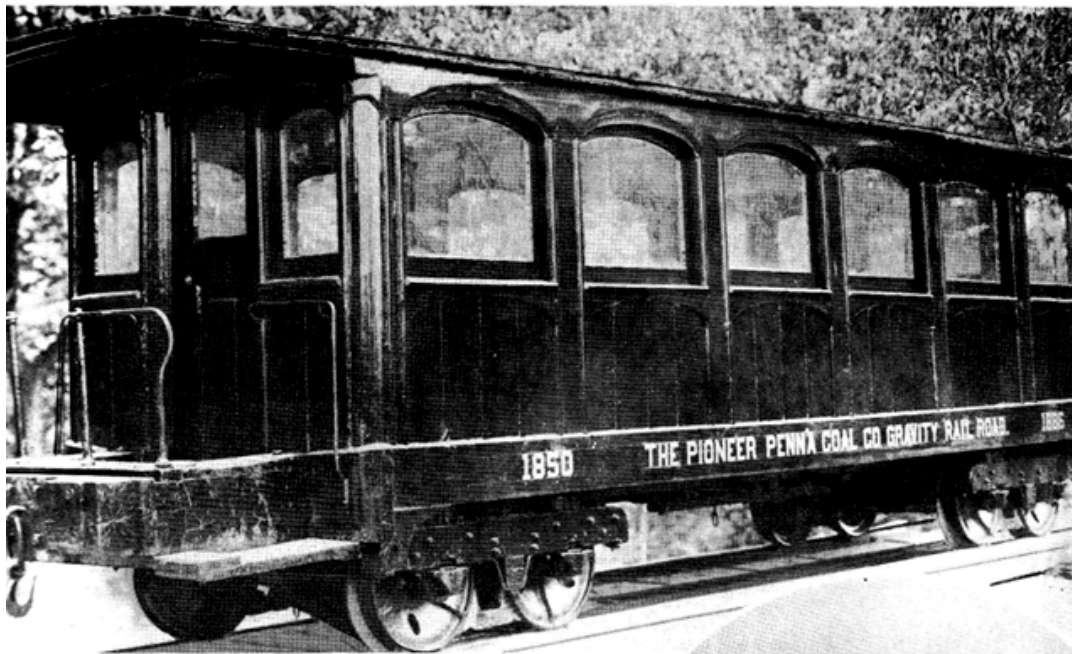


Two of the lifts. There were 22 planes in all.

tons had been delivered to the boats. Indeed, as an engineering feat the Gravity stands out as one of the unique accomplishments in railroad history. For these roads were not built like the steam locomotive roads. The track as a whole constituted a continuous loop from starting place back to starting place; in other words, there were two tracks, known as the heavy or going track and the light or return track. The loaded cars, starting at Pittston, were taken over the various planes on the heavy track to Hawley, unloaded, and then shunted around onto the light or return track back to Pittston via another route. This loop of tracks consisted of a series of ascending and descending planes. There were no level tracks. The ascending planes were called hoisting or power planes, and the descending were gravity planes. On the loaded track, there were 12 planes and on the light track, there were 10. The distance from the head of No. 11 Plane to the foot of No. 12 was 14 miles and from the head of No. 21 to the foot of No. 22 on the light track was 20 miles. At each plane, there was an engine house which supplied the power to haul the cars up the plane. Many of these engine houses were operated by water power. About six loaded cars could be hauled up a plane at one time.

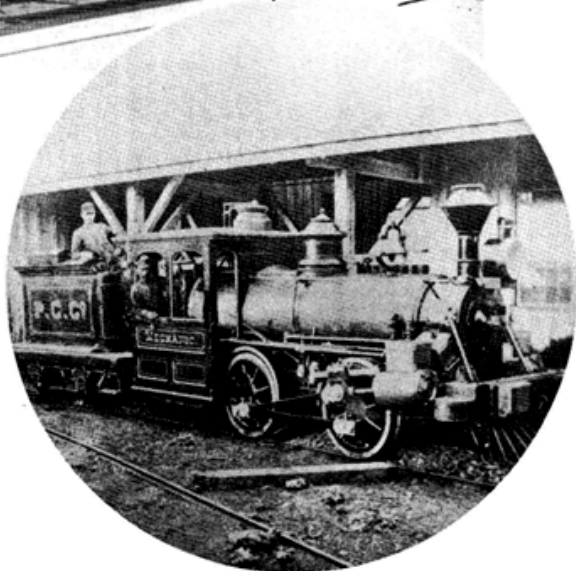
The cars ran by gravity from the top of one plane to the foot of the next, varying in distance according to the topography of the land. The planes varied in height, some being nearly a thousand foot slope. The hauling of these trips of coal cars up and down the planes was always a matter of great interest, especially to the novice. For the enormous weight involved, the height and steepness of the planes, and the rapidity of the movement made the sight a thrilling one. It stirred up considerable public interest and was frequently the goal of sightseeing visitors. Indeed it must have been a thrill for the sightseers to whisk along on this 60 mile ride from Dunmore to Hawley and back, not only because of the magnificent scenery, but also because of that added sense of danger that was part of the ride. The little car named "The Pioneer" reeled crazily along the mountains and through the ravines at a speed which, to the novice, threatened instant destruction at every turn and twist of the winding road. Actually, the speed never exceeded 20 miles an hour, but for the sake of prudence 5 or 6 miles was the limit, particularly in view of the fact that the tracks were narrow and exceedingly crooked.

The "trips" were in charge of brakemen called runners. Loaded trips generally had one at the first car in charge and an assistant at the middle or rear, depending on the size of the trip. Weather conditions were a definite consideration, for we find in a newspaper in Hawley a statement about "The Pioneer" being scheduled to leave from Hawley to Dunmore, warning, however, that if it was storming you took your own chances. The Gravity ran through a picturesque region filled with

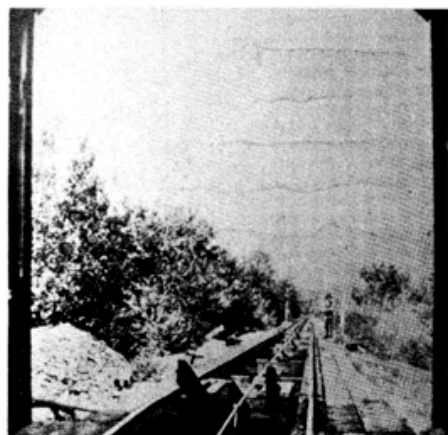
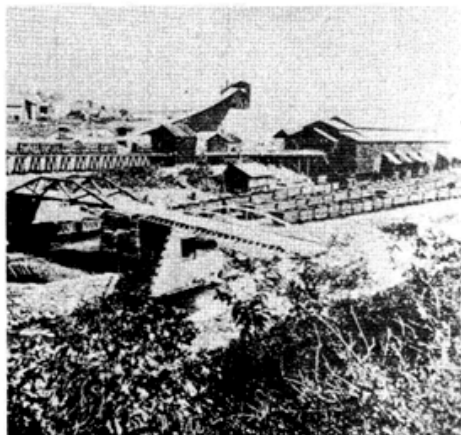


One of the early passenger cars used on the Old Gravity Railroad. It was re-conditioned by the Pennsylvania Coal Company and placed in a public park in Scranton, Pennsylvania.

One of the Pennsylvania Coal Company's early steam locomotives.



Below: Three interesting views along the right-of-way of Pennsylvania Coal Company's Old Gravity Railroad.



trees, flowers, and growing crops; and many excursions were run to Lake Ariel and other points along the Gravity.

The freight trains usually consisted of six or seven freight cars. There were two passenger trains each way, each day except Sunday. The whole trip from Hawley to Dunmore or the other way took a little over three hours. "The Pioneer" had a baggage car in the front, a smoker and coach in the rear.

The brakes were applied by means of hand work. The cars were side-seated just as many of our subway cars today. They were heated by a coal stove and the illumination was furnished by a pair of oil lamps. A car from "The Pioneer" stands today in Nay Aug Park, Scranton, as a silent witness of a day before the dawn of the Machine Age.

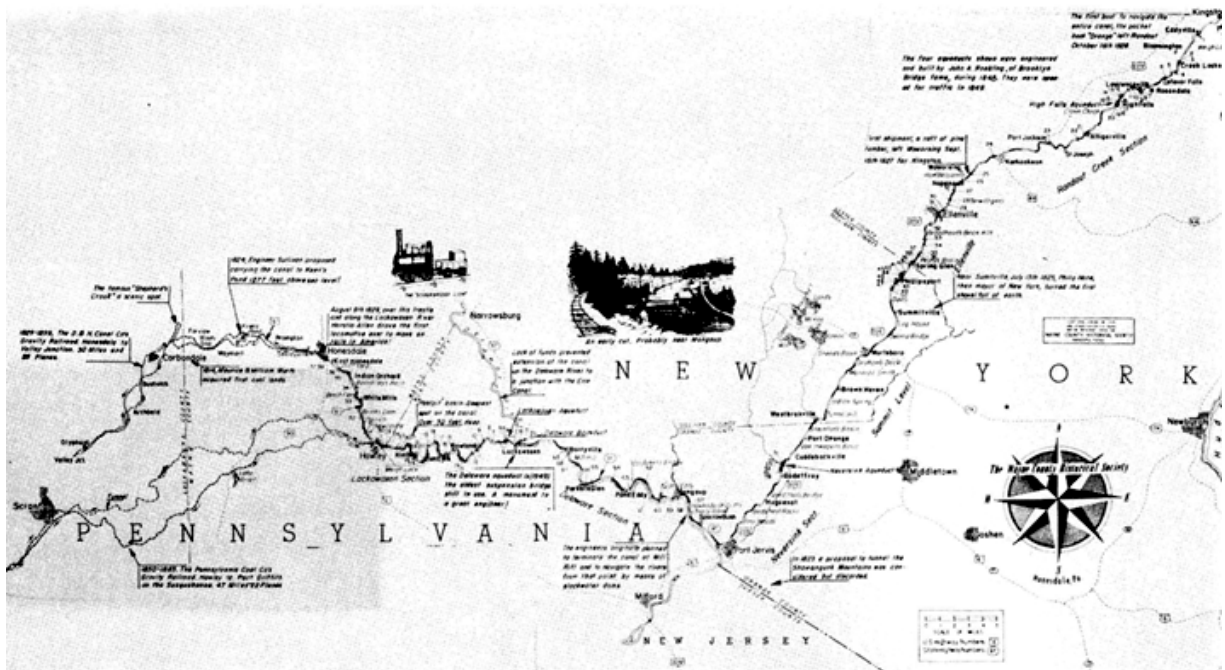
MINING METHODS AND EQUIPMENT OF YESTERYEAR

When actual underground mining operations were started, little was known either about the problems of the Pennsylvania anthracite fields or the refined techniques which came only after trial and error experience. At first, miners worked only the thickest and richest veins, and took out only the largest lumps of coal. The rest was wasted. In the early days, the miner, or "coal cutter" as he was called, used very crude tools. He used black powder for blasting, made his own cartridges by rolling heavy black paper around a stock, and sealing it with soap. These were fired by a sort of fuse known as a "squib" which was made of straw filled with gunpowder and which was prepared at home in the evenings, usually by the sons of the miners. A piece of cotton soaked with whale oil, ignited with a match completed the fire arrangement. Or sometimes the miners would set off the charge with the naked light of their lamps. The old miners of today recall their first introduction to the mines as "slate pickers," starting at the age of 9 or 10, and there are stories of younger ones who were carried to work in their mothers' arms. However, the "breaker boys," as they were called, are now little more than a memory. The few that remain are all over 18 years of age. Time has wrought many wonderful changes in every aspect of mining. A word here about the safety features in the modern miner's clothing might be of interest.

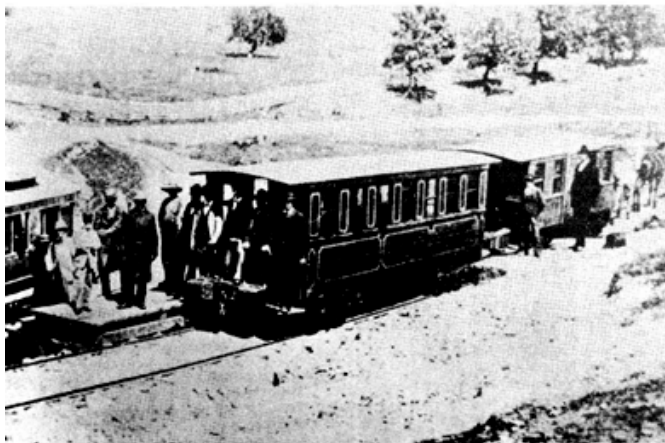
SAFETY FIRST MARKS THE DRESS OF THE MODERN MINER

Because of the hazards encountered in mine work, special type clothing is worn by the workmen to protect the most vulnerable parts of the body.

Protective or safety clothing refers to specific garments designed to give protection that ordinary clothes would not afford.



The darkened portion of the map shows the terrain covered by the Pennsylvania Coal Company's Gravity Railroad from Hawley to Port Griffith on the Susquehanna River, 46 miles with 22 planes.



Dunmore Terminal during Civil War days.



Photo taken at Hawley Terminal.

Safety clothing is carefully chosen not only to afford protection but also for durability and comfort.

Some of the articles of wearing apparel in every day use are helmets, goggles, respirators, gloves, legbands, safety shoes, knee-pads, safety belts, flame safety lamps and electric cap lamps.

Helmets or hardboiled hats are worn primarily to protect against the hazards of falling material such as roof rock and top coal; they also protect against injuries from bumping against low objects and are non-conductive of electric currents. Most helmets are molded from hard, smooth, tough bakelite of special composition that does not soften or deteriorate from water, oil or perspiration. The crown is reinforced with steel wire to add strength to the bakelite. The outer shell is supported by a cradle or hammock of strong webbing which keeps the shell away from the head and cushions it against blows. Soft, flexible, adjustable sweatbands provide a comfortable fit.

GOGGLES. There are certain phases of coal mining where the incidence of injury to the eyes could be high. For instance, breaking coal with a hand pick, using a hammer to break large pieces of rock into pieces small enough for handling easily, digging hitches in bottom or top rock to the proper setting of timber, testing roof with a steel bar, topping coal cars at loading points and other similar duties. Goggles, therefore, are worn for protection by the miners while engaged in any of these jobs.

When not being used, they are kept either on the person of the workman or at a place where they are immediately procurable. Because they're less apt to fog, the spectacle type goggle is generally used.

RESPIRATORS. One of the many problems that is present in almost all coal mines is that of dust control.

In places which become dusty after blasting, the coal is wetted down by use of a sprinkling system. Respirators are used in drilling or performing any other work requiring their use as protection against dust or vapors.

They have a soft rolled edge for a snug fit around the nose and mouth, and a strap to adjust for comfort. Attached to the respirator are plastic filter lids which are threaded thus making them easy to attach to or detach from the respirator.

Inclosed in these lids are disc-shaped filters chemically treated and designed for low resistance against breathing and at the same time affording protection to the wearer against dust and vapors by cleansing the air as it passes through the filters when the wearer breathes.

GLOVES. In and around the coal mines, as in almost all industries, hands and fingers are involved in a large percentage of injuries. Therefore, gloves are used as a protection against abrasions, scratches, cuts,



a Here is your present day coal miner, who equipped with all modern safety devices, goes down into the Stygian gloom of the underground to bring coal treasure to the surface.



b



c

b Modern explosives are used to break the coal from the seam. Preparatory to blasting, the face of the seam is drilled carefully so it will break down evenly.

c After the blast, the broken coal is shoveled onto conveyor belts that carry the coal to the mine cars in the main aisles.

d Supporting beams are placed carefully to prevent cave-ins.



d

bruises and burns while handling coal or rock and in the performance of most every type of work. Usually, canvas gloves are worn. However, when chemicals used in the lamphouses for refilling the cells of the electric cap lamps are being handled, light rubber or neoprene latex gloves are used. Linemen engaged in electrical work wear rubber gloves of special type, which are in turn protected from damage by over gloves of leather.

LEGBANDS. Legbands are used to hold pants bottoms in a snug, comfortable fit around the ankles to reduce the hazards of tripping and of being caught in moving machinery. They are of rubber or elastic construction about $1\frac{1}{2}$ " wide and 9" long. They are adjustable and held on the legs by metal fasteners.

SAFETY SHOES. Safety shoes are of either rubber or leather construction with reinforced toe caps to protect the wearer's toes from falling objects and crushing weights.

Steel toe caps are built into the toe of the shoe and have a flange on the bottom which is supported upon the sole of the shoe.

KNEE PADS. Knee pads are used mostly by men working in low veins both for comfort and to protect their knees from being pierced by sharp coal or other hard objects and to prevent what is sometimes called housemaids' knee.

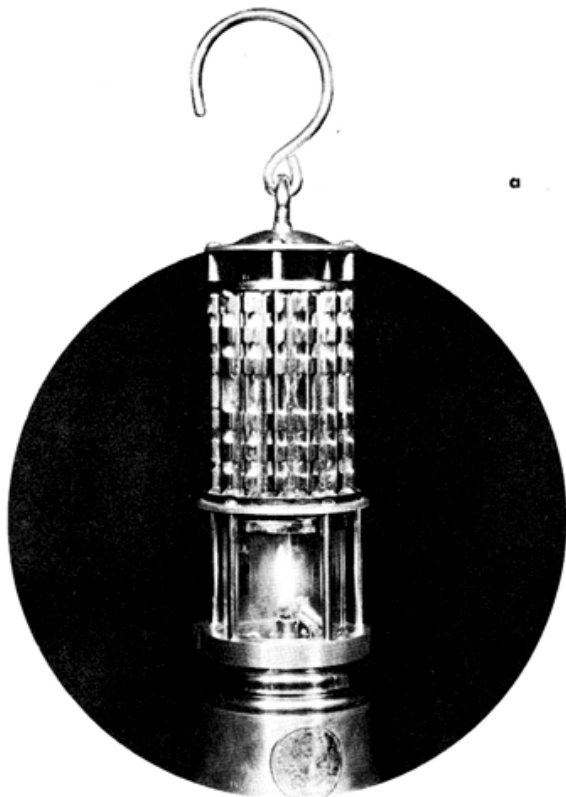
They are constructed of tough rubber with corrugated or waffle tread to prevent slipping. On the inside of each pad is a thick sponge-like insert for added comfort. The pads are held on the knees by two adjustable straps.

SAFETY BELTS. In and around the mines safety belts are principally used by workmen making repairs in shafts. Men dropping railroad cars at the breaker wear them for protection against falling.

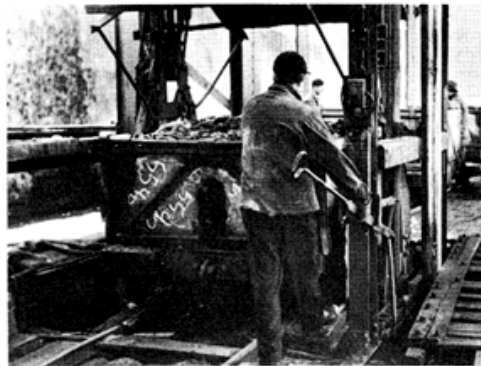
The waist belt and shoulder straps are generally made from heavy webbing of high tensile strength. Attached to the waist belt by means of a metal D-shaped ring is a double length of manila rope which is spliced in the center. On the end of the rope is a specially designed hook which is easily fastened to the railroad cars or mine cage to prevent the wearer from falling.

THE FLAME SAFETY LAMP. One of the most important operating problems continually confronting mine management is the provision of fresh air to all parts of the underground workings. The solution to this problem is accomplished by what is called mine ventilation.

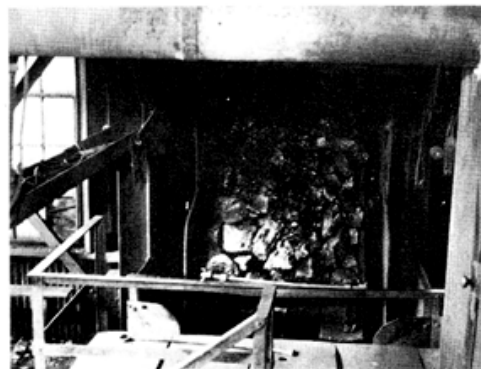
Mine ventilation consists basically of the induction of fresh outdoor air to the mine through an opening from the surface, passing this air current in whole or in part through all passages in the mine by use of various types of deflectors or baffles, and then exhausting the air again to the surface through another opening.



- a *The Flame Safety Lamp. Here is the guardian of the mine workers. The lamp continually tests the mine's atmosphere and warns of the presence of the most common explosive and toxic gases or the absence of sufficient oxygen.*

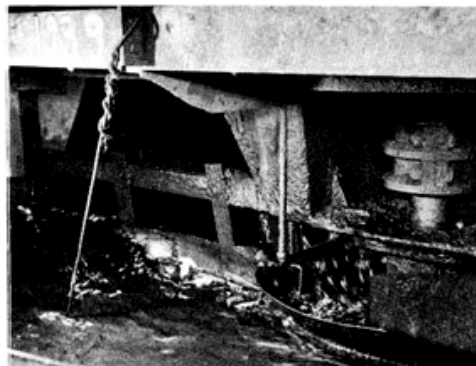


b



c

- b *The loaded cars are transported swiftly to the surface by express elevators.*
- c *Here the loaded cars are dumped onto a conveyor belt that carries the coal to the top of the preparation plant.*
- d *After crushing, the coal is washed and separated from the rock and dirt by the flotation method.*



d

The purpose of ventilation is to provide an atmosphere within the mine containing an oxygen content normal for the support of life and to dilute, render harmless and carry away all explosive or toxic gases generated within the mine.

The instrument regularly used in mining operations to determine the presence of the most common explosive and toxic gases in harmful or dangerous percentages is the flame safety lamp.

Basically the flame safety lamp consists of a small wick flame fed by naphtha which is surrounded by a fine mesh wire gauze separating the flame and the air immediately adjacent to it from the surrounding atmosphere. There are 784 square mesh openings per square inch in the wire gauze.

If the lighted lamp is placed in an explosive mixture of gas and air, the mixture will be ignited by the flame and will burn or explode within the confines of the wire gauze, but the heat created by this burning will be dissipated by the gauze, and will lower the temperature at the gauze to a point below the ignition temperature of the gas-air mixture. Thus the explosive atmosphere surrounding the lamp will not be ignited.

The basic lamp principle as outlined above has been supplemented by use of two gauzes over the flame instead of one for added safety; bonnet coverings to protect the gauzes, a glass insert at flame level to make the flame more readily visible and to provide more illumination. Furthermore, a gauze protected air admission ring below the glass insert provides air movement to the flame. The principle of the device remains unchanged.

Methane (CH_4) is the chief explosive gas generated in an anthracite coal mine, and the one the safety lamp is used to detect. This gas is explosive in a gas-air mixture when present as 5% to 15% of the mixture.

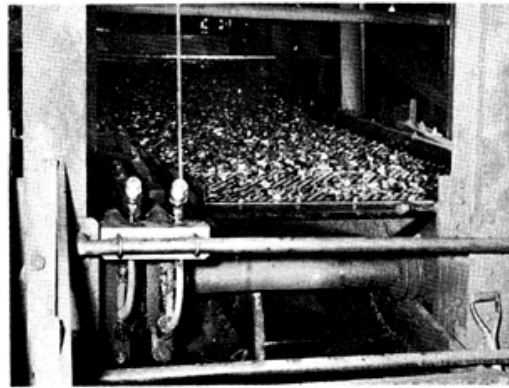
A second use of the safety lamp is to guard against mine air containing less oxygen than required to support life. The flame of the safety lamp will be snuffed out because of insufficient oxygen in the air mixture when oxygen content is reduced to a point dangerous to human life. The most common toxic gas in mine atmospheres is Carbon Dioxide (CO_2). The prevalence of this gas increases as the oxygen is reduced by the breathing of the mine workers and by the decay of wood timbers used in working the mine.

The flame safety lamp as used in anthracite mines today is a piece of safety equipment provided to guard and warn the mine workers against the imminent danger caused by the most common of the explosive gases plus the detection of oxygen deficiencies encountered underground.

ELECTRIC CAP LAMP. The electric cap lamp is vastly superior to the open type lamp. They give a uniform steady light that is not extin-



a *A modern electric "mule," which has replaced the animal itself, pulls the loaded mine car to the elevator shaft.*



b *Shaker screens are employed to separate the coal into various market sizes. Constant washing during the sizing process further assures a clean product.*



c *The washed and sized coal is loaded into railroad cars for shipment; continuous care in handling prevents degradation.*

d *Each car is sampled throughout by taking several buckets full from different sections of the car.*



guished by concussions or high velocity air currents and also afford protection against gas ignition and fires.

The lamp consists chiefly of three light weight wet cells encased in rubber which are in turn encased in a stainless steel battery case, the lid of which is magnetically locked to prevent tampering.

Attached to the battery case by means of a rubber covered cable 42" long is a bakelite headpiece 2 $\frac{3}{4}$ " in diameter with a metal reflector and a double filament bulb. These are held in place by a strong glass lens, a one piece rubber lens gasket and a flanged screw ring. On the right side of the headpiece is a thumb type off-and-on switch. A cap hook of stainless steel is located at the back of the headpiece whereby the headpiece is attached to the wearer's cap allowing freedom of the hands.

The lamp weighs approximately 6 $\frac{1}{2}$ pounds and is designed so that it can be easily attached to the belt of the wearer permitting free movement of all parts of the body.

But now, back to our story.

LABOR UNIONS COME INTO THE PICTURE

The year 1884 marked the organization of the Miners and Laborers Amalgamated Association, a large union of miners in the anthracite field. This was a continuation of the Benevolent Association which was dissolved in 1875. In 1887 the Miners and Laborers Amalgamated Association merged with the Knights of Labor. It was in 1900 that the United Mine Workers of America who had previously operated in the bituminous fields took its first important step in the anthracite mining districts. After the strike of 1902, the Mine Workers was firmly established. This strike involved the whole anthracite field and was ended only after the intervention of President Theodore Roosevelt. The first general agreement between operators and miners was entered into in 1906.

THE MOLLY MAGUIRES

Coincident with the evolution and development of these labor organizations there flourished a group known as "The Molly Maguires." It was a secret society said to have its origin in Ireland, and first active in this country during Civil War times. It was in 1862 that this organization had its first brush with the law. It seemed the Federal Government proposed its first draft of men for the Union Army. In an effort by the Molly Maguire group to prevent the enrollment of draftees, mine bosses and others were beaten and murdered, and many private homes destroyed. The organization grew rapidly, and in 1871 a superintendent



a The miner shown is carefully placing an explosive charge to break the coal into pieces that can be easily handled.



b

b The large sample from the car is "quartered" down to a smaller representative sample.



c

c The smaller sample is broken up into a size handled by the laboratory.

d An experienced operator "quarters" the prepared sample down to final representative lab sample. This sample is then tested at the analytical lab for various characteristics such as moisture, ash, and volatile content assuring quality throughout every shipment.



d

was murdered. The crime took place in the early evening before many witnesses, but no one would identify the murderers. Similar murders followed, and it was not until 1876 that these outlaws were confined by law; their operations curtailed and finally stopped.

A GREAT INDUSTRY IS LAUNCHED

In examining the records of growth and progress of great American enterprise we note that ultimate success is contingent upon certain factors. One in particular is traceable in every great venture, and that is vision — the power not only to recognize the intrinsic worth of an object, but to foresee its place in terms of future growth and usage. Fortunately for America, men of vision were on hand when the coal business was in its infancy as they are now, men who like their counterparts throughout history were laughed at and ridiculed because they dared to see beyond the immediate horizons. The coal industry was founded by such men, and many of the great coal companies which now serve the coal needs of America were launched. The Pennsylvania Coal Company is a good case in point.

EARLY OFFICERS

The first president of the Pennsylvania Coal Company was Charles T. Piersen who served for a period of 10 years, from 1838 to 1848. It is not necessary here to enumerate the names of all the 15 presidents. Some of them served for very short terms. Irad Hawley, for instance, after whom the Borough of Hawley is named served only one year, from 1850 to 1851. He was succeeded by John Ewen after whom the Ewen Colliery was named. John Ewen was president for 26 years and served for a longer term than any other president.

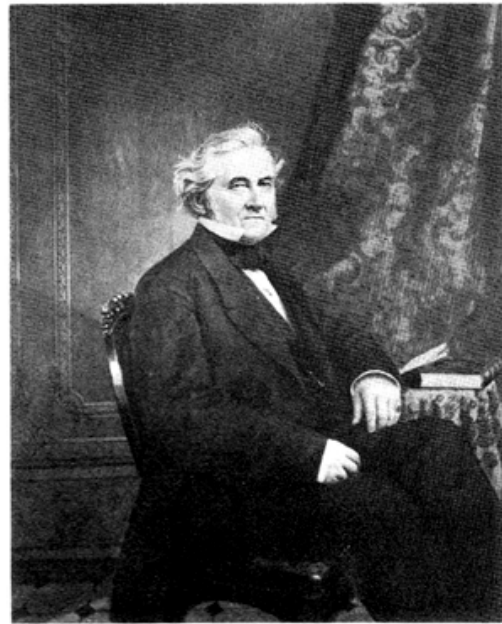
MR. HARRY CONNOLLY

When one peruses the history of many of the large companies, it is most disconcerting to note that frequently all that is left behind after an executive passes are the dates of his tenure and a few records of his administration. Yet, we know that in every individual instance the stamp of the man's personality has been left on the organization, plus his innumerable contributions which sometimes fail to reach the light of general recognition. Fortunately, we know much about Pennsylvania's top executive officer, Harry J. Connolly. For we have known him over a period of many years and have seen him work. We have seen the results of these labors and thus have a more intimate picture of our subject and his accomplishments.

Were you to meet Mr. Connolly today, you would find him a quiet and soft-spoken, middle-aged man, quite reserved in manner and possessed of a keen and penetrative mind. This becomes evident when one



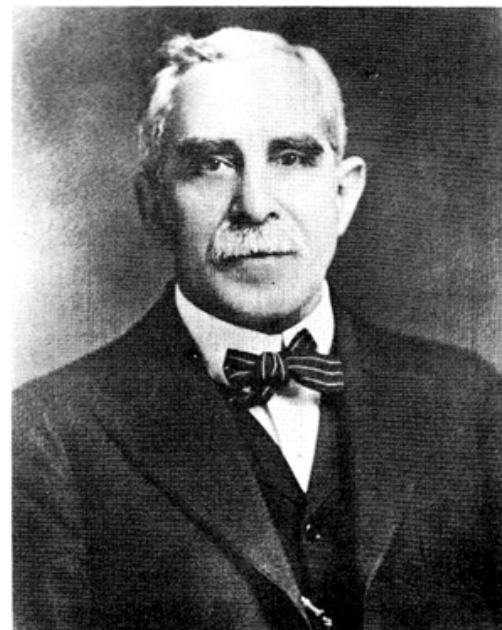
Charles T. Pierson, first President of the Pennsylvania Coal Company. He served in that capacity from 1838 to 1848.



Irad Hawley served as President of the Pennsylvania Coal Company from 1850 to 1851. The Borough of Hawley was named after him.



John Ewen served as President of the Pennsylvania Coal Company during the years from 1851 to 1877. Ewen Colliery was named in his honor.



W. A. May served as President of the Pennsylvania Coal Company during the years from 1913 to 1923.

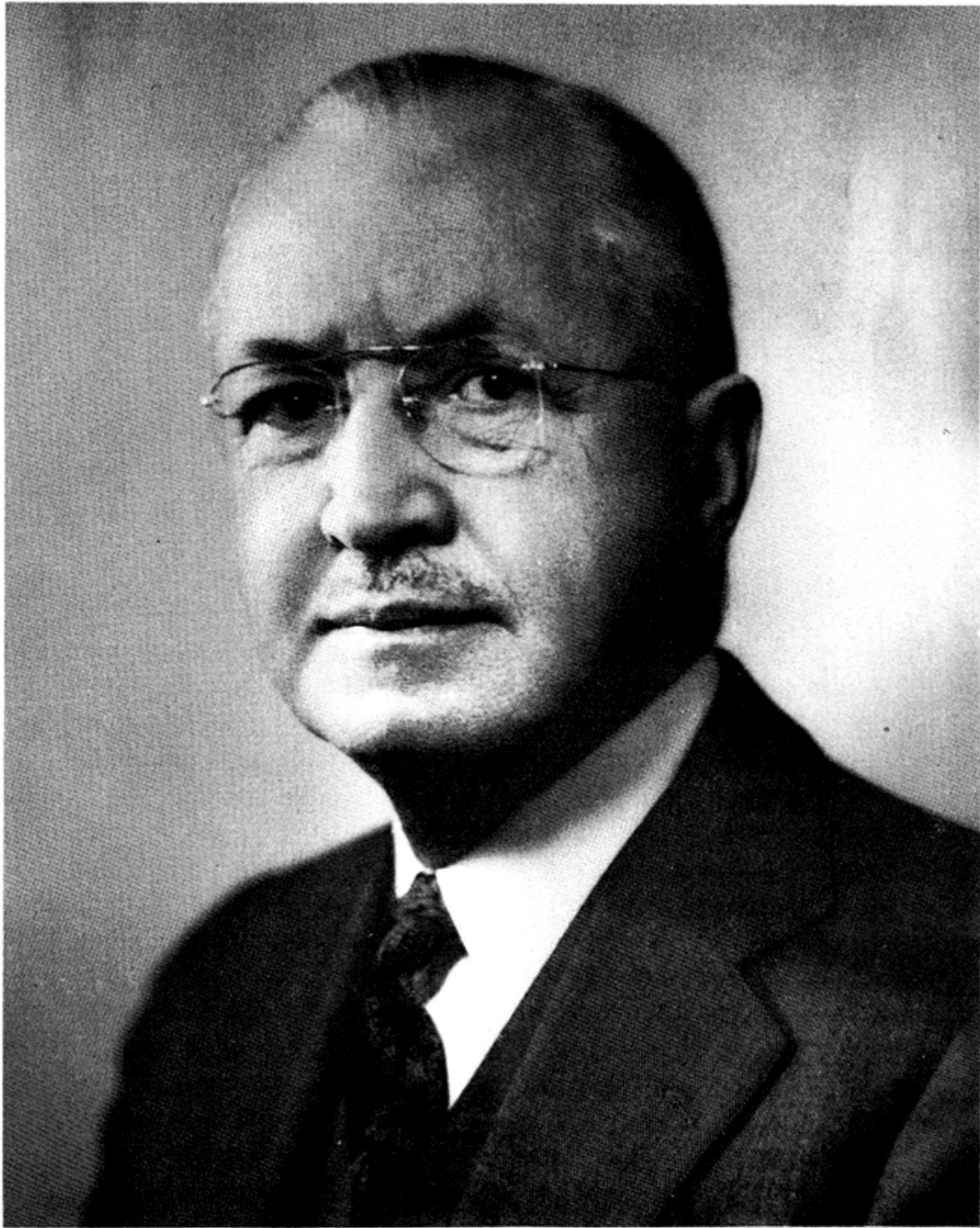
engages him in conversation. His law training has been an invaluable asset, not only from the professional point of view, but in the general perceptive cast of mind it has helped create. Mr. Connolly is a most forthright person, although beneath his rather stern exterior manner there is a warmth and kindness of nature. This is undoubtedly the reason for his popularity with the employees. For his consideration of them has endeared him to all.

If one word could epitomize the essence of Harry Connolly, that word would be wisdom — that rare combination of knowledge tempered by experience. And as the philosopher says, when you say a man is wise, you've said all.

The same executive drive which characterizes Mr. Connolly's work at the Company carries through to his community. For he has participated in many community activities designed to better every aspect of life in Scranton. All one has to do to prove this is to cite the many civic organizations of which he is a member. Here are a few: he is Director of the Scranton Chamber of Commerce; trustee of the Scranton Community Chest as well as its President during 1948 and 1949; a trustee of the Pittston Hospital Association and the Dunmore Cemetery Association, and a Vestryman at the Church of the Good Shepherd from 1919 to 1926.

Harry Connolly's birthplace was Scranton, Pennsylvania. His father, D. W. Connolly, a lawyer, was a Congressman and Postmaster of Scranton. After elementary and high-school training at the Scranton public schools, he matriculated at Princeton University and was graduated in 1906. Subsequently, he studied law in the office of Willard, Warren, and Knapp. In the year 1909 he was admitted to the bar, and in 1921 to the Supreme Court of the United States. Mr. Connolly's first association with the Pennsylvania Coal Company was in the capacity of Counsellor, which position he held from 1913 to 1930. He was likewise Counsel for the Hillside Coal and Iron Company, the Northwestern Mining and Exchange Company, The New York, Susquehanna and Western Coal Company, and The Blossburg Coal Company. In 1931, he became Vice President in Charge of Operations and Director of The Pittston Company, in which capacity he served until 1938. The Pennsylvania Coal Company named him as its President in 1939. He was the Director of Industrial Management for Anthracite in the Coal Mines Administration in Washington during the Second World War when the mines were taken over by the Government. In 1946 he represented the anthracite industry on the Coal Mines Committee of the International Labor Organization, London, England, and in 1949 served in a similar capacity in Pittsburgh, Pennsylvania.

A further facet in Mr. Connolly's business acumen is his keen



Harry J. Connolly joined the Pennsylvania Coal Company in 1913 in the capacity of Legal Counsel. He became Vice President in charge of operations in 1931. In 1939 he became the fifteenth president of the corporation, in which capacity he is still serving.

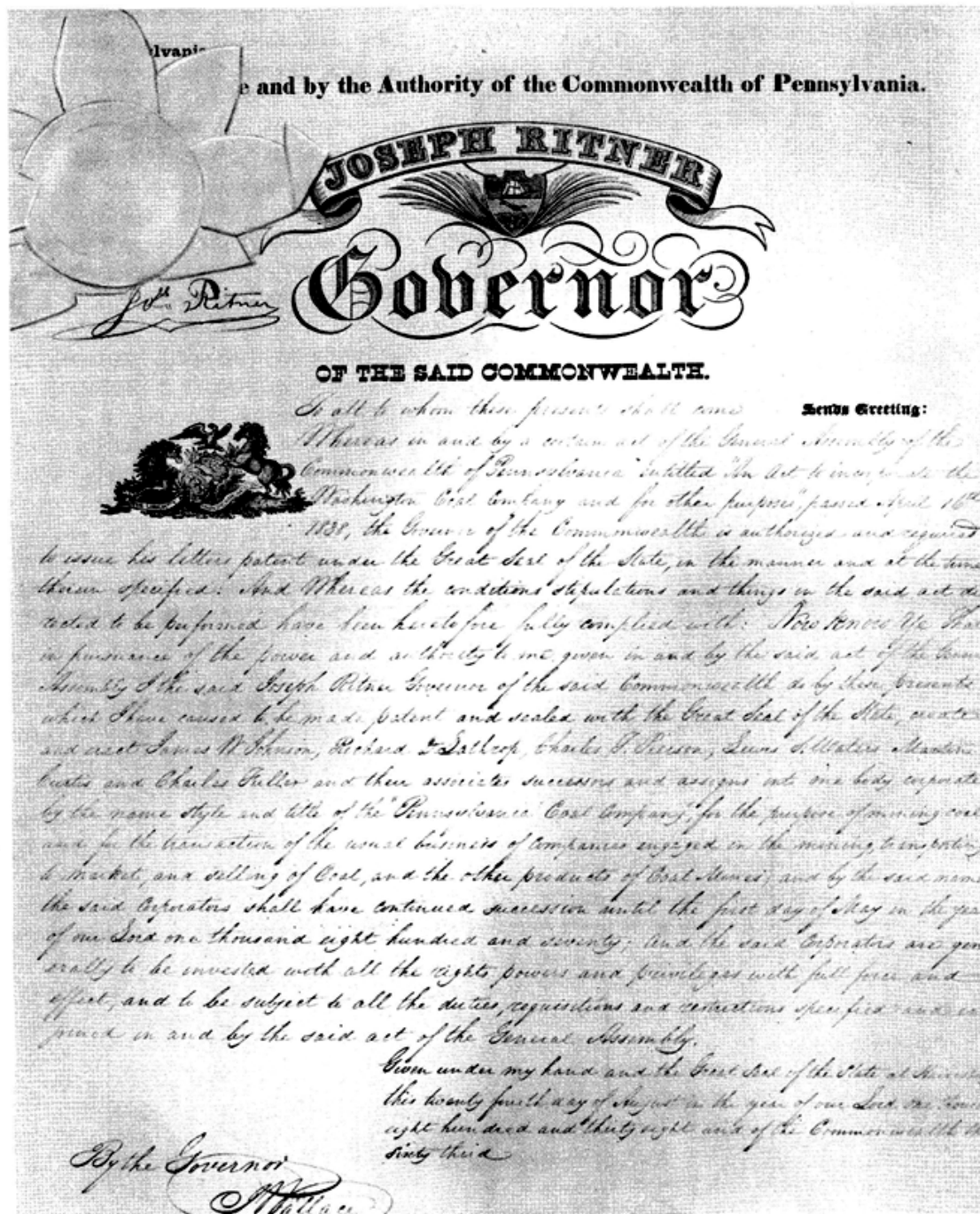
appreciation of the merchandising and advertising phases of the picture which, by the way, seldom go hand in hand with the nature of his business background and executive experience.

HISTORY OF PENNSYLVANIA COAL COMPANY

The Pennsylvania Coal Company was incorporated in the State of Pennsylvania under a special act entitled "An Act to Incorporate the Washington Coal Company and for Other Purposes," which act became a law April 16, 1838. The first 13 sections of this act relate to the Washington Coal Company which was incorporated for the purpose of mining coal, and for transacting the usual business of companies engaged in the mining, transport to market, and selling of coal and the other products of coal mines, but nothing therein was to be construed as giving to said company any banking privileges. The company was authorized to hold, either by purchase or lease not exceeding 2000 acres of land at any one time, the whole to be within the Lackawanna Valley in the County of Luzerne, Pennsylvania, and to sell or otherwise dispose of same or any part thereof as the interest of the company may require. Capital stock was fixed at \$300,000 in shares of \$50.00 each. Letters obtained pursuant to this act (to continue until May 1, 1858) were issued under date of October 6, 1847 to the Washington Coal Company.

The balance of the act, beginning with Section 14, relates to the Pennsylvania Coal Company, incorporated for the purpose of mining coal, etc. It was further provided that the Company should have the right to hold not exceeding 1000 acres of land at any one time, the whole to be within the Township of Pittston, Luzerne County, Pennsylvania, and to sell or otherwise dispose of the same as the interests of the Company might require. The capital stock of \$200,000 was to be divided into shares of \$50.00 each. Numerous supplements to said act were approved, such as the authorization for the Pennsylvania Coal Company to hold land in the Townships of Lackawanna, Nescopeck, and Providence in Luzerne County, to increase the capital stock, to borrow money, to extend and connect its railroad with the Delaware and Hudson Canal or Railroad, and other specifications.

The properties of the company were acquired over a period of time, some by outright purchase and many by lease, so that it finally built up holdings covering thousands of acres in what is known as the Wyoming or Northern anthracite field. The properties are generally grouped in the Pittston area in Luzerne County, and in the Dunmore area in Lackawanna County. The first opening on lands of the Pennsylvania Coal Company in the vicinity of Pittston seems to have been made in 1842. This opening was then known as the Number 1 Shaft. As far as is known,



A reproduction of the original charter issued on August 24, 1838 to the Pennsylvania Coal Company.

the first opening on the lands in the Dunmore area was made about 1850. This opening was known as the Boardinghouse Tunnel and was in the vicinity of the present General Office of the Company. Prior to the year 1872, coal was loaded at nothing more than tipples. After a rough screening, the smaller sizes were wasted. In the year 1872, the Company built 2 breakers, so called because they broke down the larger lumps. These breakers were what might be termed central breakers. One was located along the Gravity Railroad at the head of Number 6 plane in Dunmore, and the other at the end of the Gravity in Hawley. In later years a washer was built and the waste material from the original breaker operation was recovered. At Hawley, the old Connor basin had been filled with the wasted material. Much of it was recovered during the period of World War I and shipped to market.

The present Company is a reincorporation formed by the stockholders March 8, 1895, acknowledged March 19, 1895, and filed with the Secretary of the State of Pennsylvania April 17, 1895.

It is interesting to note the names of the first of the early shareholders of the Pennsylvania Coal Company, names that have made financial and political history in America. For instance, John Gould, Robert and Ogden Goellet, Mary Havemeyer, Oliver Harriman, James Roosevelt, Sarah D. Roosevelt, the Roeblings, the Suttons, and many others.

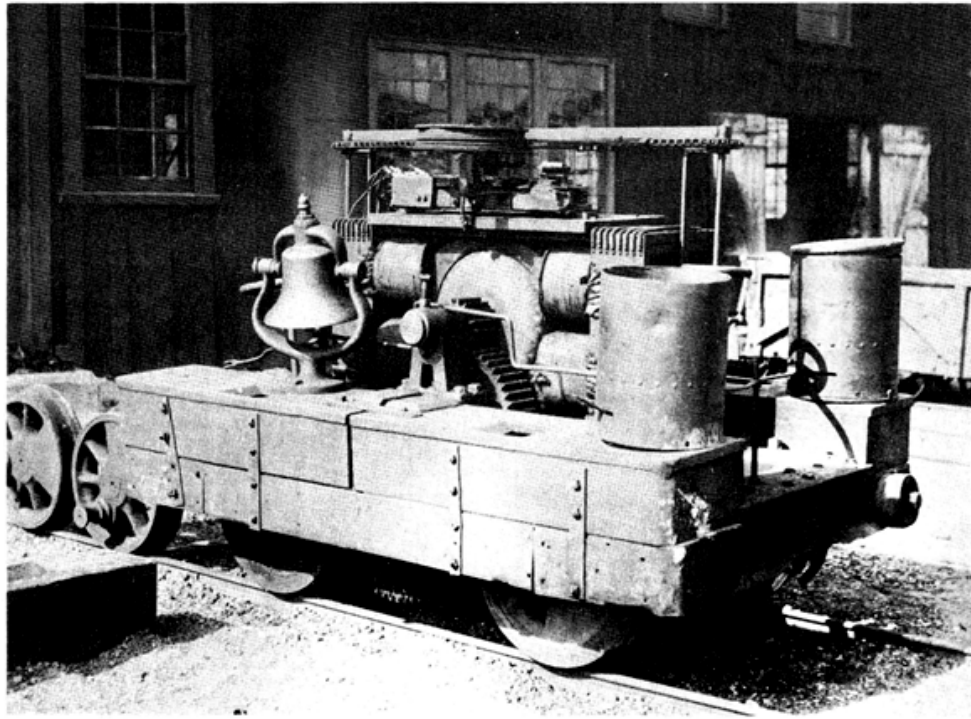
AN EARLY ENGINEERING FEAT

As the mines of the Company developed, water became a real problem, and there stands to the credit of the engineering force of the Pennsylvania Coal Company two tunnels which solved in part these problems. During the latter part of July 1911, the Company completed at Pittston, Pennsylvania, an engineering feat that attracted wide attention among men interested in coal mining under difficulties. In order to avoid constant and expensive pumping operations, it was decided to drain certain of the workings by gravity.

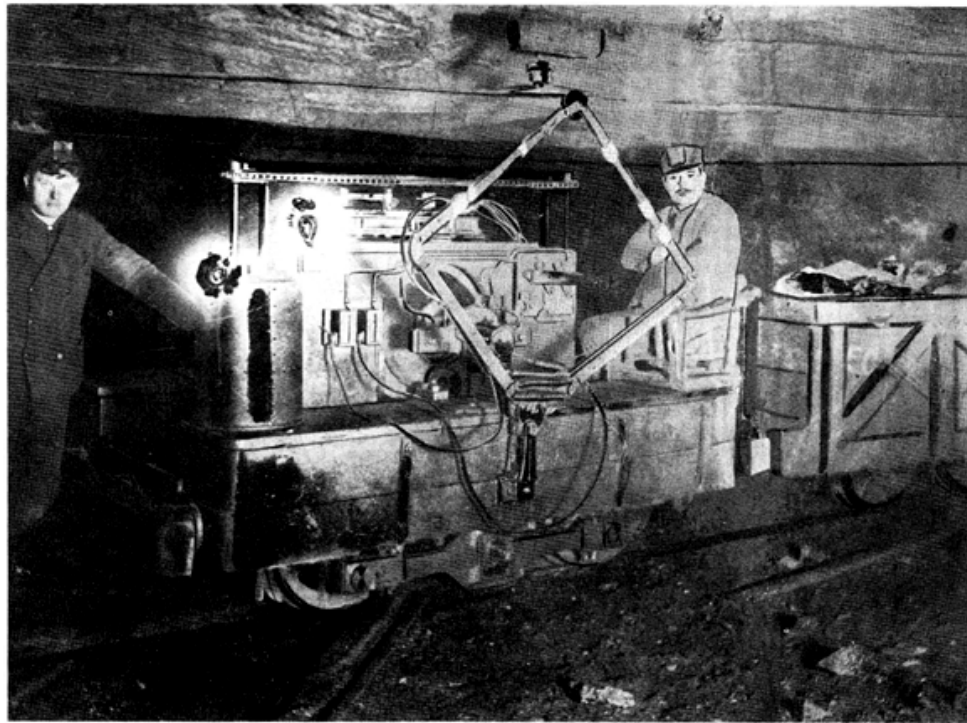
A 7900 foot tunnel known as the Pittston Water Tunnel and which is still in use was drilled under the City of Pittston and a part of Pittston Township in Luzerne County, emptying into the Susquehanna River. This tunnel drains the Butler Colliery workings near Pittston. The tunnel was principally through rock but a substantial distance was through sand where a concrete lining was required and where conditions were such that much of the work had to be done within air locks.

Similar engineering success crowned the efforts on the tunnel constructed to drain the mine workings of the Company in the Dunmore area, Lackawanna County.

Such were the types of problem that beset the path of the Penn-



One of the first electrical motors used in the anthracite fields was installed about 1885 at Erie Colliery. It is now housed in the museum at Dearborn, Michigan.



The first electric locomotive successfully installed in the anthracite region. It first operated at the Erie Colliery.

sylvania Coal Company in the early years. Such were the brains and ingenuity that could always be summoned from the various administrative levels to successfully diagnose and solve these problems. No wonder, then, that the passing years have crowned the Company with success and an enviable record of achievement.

Today, the Company actively operates the Ewen Colliery at Pittston, Luzerne County, and the Underwood Colliery at Olyphant in Lackawanna County.

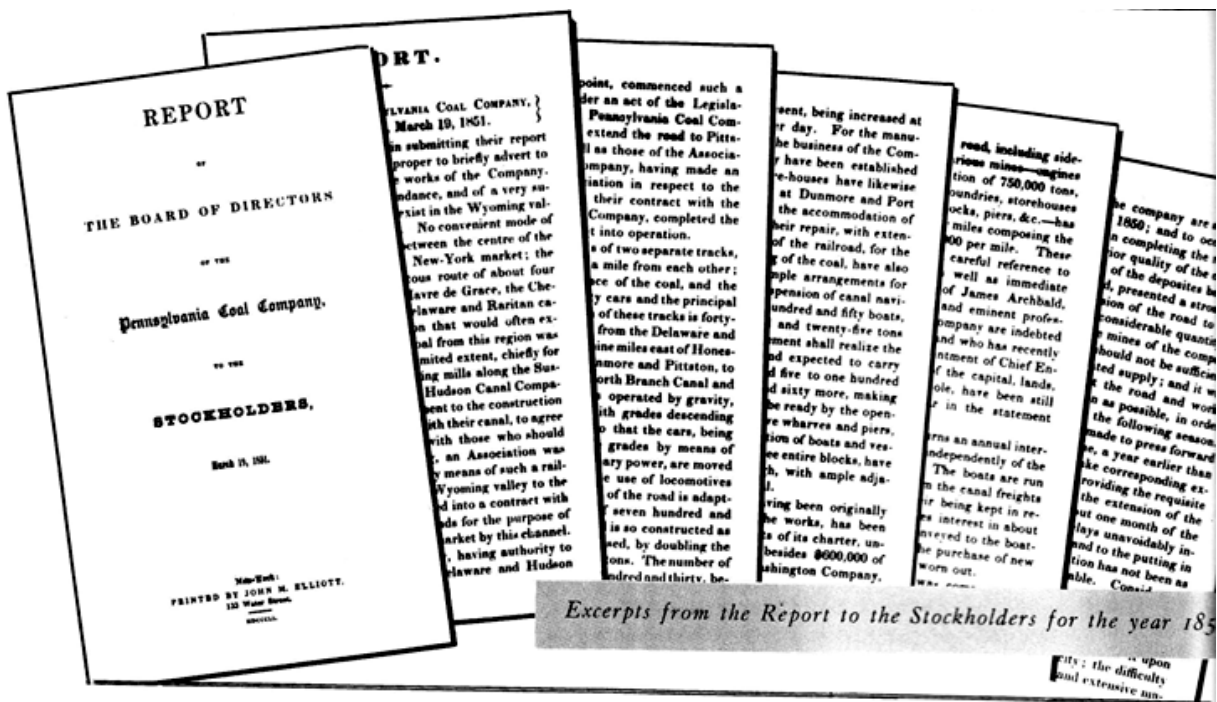
At Ewen, the seams of coal worked are Checker, Pittston, Marcy, Clark, Red Ash. Seams are from 36 to 144 inches in thickness. At Underwood, seams are Clark, Dunmore 1, 2, and 3, 24 to 84 inch thickness. The preparation equipment at Ewen includes Menzies Cone, Jigs and hydro-separators, and the mines are equipped with scrapers, belts, shakers, and conveyors. The coal sizes range from egg to barley. Similarly, at Underwood the preparation equipment includes Jigs, hydro-separators, and Menzies Cones, and the mining equipment includes scraper and shaker conveyors. The sizes of coal mined at Underwood also range from egg to barley.

In 1947 and 1948, the combined output of both operations was approximately 3,300,000 tons. The coal is marketed under the trade name of Jet Black Anthracite, which by the way is the oldest trade name in the anthracite industry.

WHAT'S IN A NAME

Were you to visit the offices of the Pennsylvania Coal Company today, you would notice at the entrance to the office building an imposing sight — a massive chunk of jet black anthracite — the largest single piece of hard coal ever to be brought above the surface of the earth. When you see it, you somehow become aware that this mammoth block of coal has a deeper significance than the fact of its size. For you view it as a cornerstone, as it were, about which the Company was built. You see it as a symbol of strength, power, and indestructibility. For just as time and the elements have failed to make inroads upon this mound of coal, so too have the trials and vicissitudes of over a hundred years of operation failed to alter one iota the fundamental ethics of the Company itself.

Today, as always, producing a quality product which is mined and prepared by the most modern mechanical equipment and handled by a select personnel is the Pennsylvania Coal Company's by-word. For quality has been a tradition at the Company — a tradition that began with the founders over a century ago when the country was making its first impressive strides toward economic greatness. Through generations this tradition has been zealously guarded and preserved as one Company



Statement of the Business of the Pennsylvania Coal Company for the Year 1850.

To 127,571 tons mined and purchased.....	\$97,169 47	By estimate proceeds of coal delivered to the D. and H. Canal Co. 111,194 tons. at..\$3 60	400,298 40
„ Road Expenses—which includes transportation, expenses at planes, screening coal, and repairing cars and track.....	78,157 49	„ sold at Hawley and Dunmore..... 666 „	1,673 10
„ freight and tolls on coal to Rondout.....	168,020 77	„ on hand at Hawley, 500 „ at..\$1 00	500 00
„ proportion of expenses for sales of coal, by D. and H. Canal Co. estimated.....	17,791 04	„ on hand at Pittston and Dunmore.... 1,511 „ at.. 0 50	755 50
„ commissions to be paid D. and H. Canal Co.,	8,895 52	„ used at engines of the Company 13,700 „	
„ demurrage paid boatmen	13,303 89		
Balance.....	31,413 10	127,571 tons.	
		„ amount received for freight on road.....	11,524 28
	414,751 28		
		Balance.....	\$ 31,413 10

JOHN EWEN, Treasurer.

nd been actually true—
the partial operation of the first year, reached a point which has not been attained by any other connection which has not been attained by any other connection until after many years, is a gratifying assurance of the general success of the undertaking.

The disproportionate cost of using a road and engines for a quantity about one-seventh of that to which they are adapted—the extra expenses attending the use of new machinery—the heavy charge incurred for demurrage from unavoidable detention of boats, awaiting the completion of the new locks on the canal near Eddyville—the increased expenses of the canal transportation, owing to the unfinished state of the enlargement, and the breaches attributable to the newness of its banks, and the severe frosts which characterized the last year—and the advance of one-third in the cost of the coal—these are some of the reasons which have caused the company's own purchases over that produced from the company's own mines—have to some extent consumed the profits on the amount actually brought to market. The results of the partial business done under these circumstances, are nevertheless more favorable than might have been expected; and its experience has confirmed the calculations which have been made as to the efficiency of the works of the company, and the facility with which their coal can be produced and delivered in this market.

The main lands of the company are at Pittston, on the Susquehanna, lying in the centre of the northern coal field, where the coal is found in peculiar purity, and great abundance, and in veins of massive thickness, from which it is cheaply mined. The coal has been used on board of our transatlantic and other steamers, and proved of superior quality for steam purposes.

increase the power of vigorous operations affecting new openings the maximum quantity period; and they have some of these operations to enable the Board on basis of actual experience be expected during up to the 17th of which was deposition since that which rate, allowing at slope and shaft, in all, will be present production is vis:—

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„ 46 „
„ 15 „
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Pittston. An additional commenced near the of early success. report, are gratified of the Legislature of passed, authorizing of the property and disition,” and to cre- purpose. It is pro- tion of such an ar- also shares of addi- also authorizes an from five to nine, arish, William F. bert B. Minturn,

WILEY,
President.

OFFICERS

OF THE

PENNSYLVANIA COAL COMPANY.

Directors:

IRAD HAWLEY,
WM. R. GRIFFITH,
ISAAC L. PLATT,
WM. H. FALLS,

JOHN EWEN,
DANIEL PARISH,
WM. F. HAVEMEYER,
MOSES TAYLOR,

ROBERT B. MINTURN.

IRAD HAWLEY, PRESIDENT,
JOHN EWEN, TREASURER,
E. J. HAWLEY, ASST. TREASURER

executive followed the other. And, though the men at the helm changed with time, this precept remained immutable, namely, producing a quality coal and enhancing it with quality service from mine to market. Although it was the prime task of the Pennsylvania Company to see to it that they produced this quality product, it was likewise their further task to see that the distribution of it was in proper hands. So it was that Pattison and Bowns, a subsidiary of The Pittston Company, was selected and is now functioning as the exclusive Eastern distributing agent, with Globe Coal Company, another Pittston subsidiary as the exclusive Western distributors. Pattison and Bowns, Inc., began the distribution of Pittston Jet Black Anthracite in 1923. It was incorporated in 1921, and since has provided that high degree of service which is commensurate with the quality of the coal itself. That's why today Pittston's Jet Black Anthracite from the Pennsylvania Coal Company has no peer in the field from mine to market — why it's the first name in Anthracite.

It would be a matter of gross over-sight not to mention the names and functions of others of the present executive group who are, and have been for many years contributing their know-how to the splendid operations of the Company. In addition to the President, H. J. Connolly, there is R. A. Lambert, Vice President and General Manager. He has served since 1940. The present Treasurer, J. E. Hallock has been with the Company since 1913; the Comptroller J. A. Martin since 1918, and the Secretary and Real Estate Agent, F. V. Lynn, has a record of service that dates from 1911. H. D. Hauser is Assistant Secretary, and W. T. Buckley, Assistant Treasurer, both of whom have grown up with the Company. The superintendents are: Wilmon Keiser, Superintendent, Mechanical and Electrical Department, with the company since 1929; L. H. Leitner, Superintendent of Ewen Colliery and associated with the company since 1910; E. C. McCarthy, Superintendent of Underwood Colliery and in the service of the company since 1913.

This, then, is the story of the Pennsylvania Coal Company, a story rich in drama and accomplishment, a story written chapter by chapter through the years in the Golden Book of American enterprise.



Brand Names Foundation

— INCORPORATED —

*In Recognition of Continuous Service
to the American People since 1852*

Awards to the Brand Name

Pittston

*For Pennsylvania anthracite coal
Pennsylvania Coal Company
Scranton, Pennsylvania
this*

Diamond Anniversary Certificate of Public Service



Given to Brand Names which have been tested by the judgment of the American People for 50 years or more and have won and held public confidence through un-failing integrity, reliable quality and fair pricing.

Authorized September 6, 1943, at New York City by the Board of Directors of the Brand Names Foundation, a non-profit corporation established to encourage highest standards of product distribution.

Charles M. Nelson
CHAIRMAN OF THE BOARD

Henry Ellet
PRESIDENT

CONFERRED AT SCRANTON, PA., NOVEMBER 4, 1948.

A Certificate of Award issued by the Brand Names Foundation to the Pennsylvania Coal Company for the name Pittston, defining quality anthracite for over half a century. In reality the trademark has been a symbol for Pennsylvania Anthracite for a much longer time.

PRESIDENTS OF PENNSYLVANIA COAL COMPANY

1838-1848	CHARLES T. PIERSON	1901-1913	F. D. UNDERWOOD
1848-1850	WILLIAM R. GRIFFITHS	1913-1923	W. A. MAY
1850-1851	IRAD HAWLEY	1923-1927	C. S. GOLDSBOROUGH
1851-1877	JOHN EWEN	1927-1930	MICHAEL GALLAGHER
1877-1888	GEORGE T. HOYT	1930-	H. A. KNAPP
1888-1894	EDWIN H. MEAD	1930-1938	C. E. DENNEY
1895-1901	SAMUEL THORNE	1938-1939	LYNN L. WHITE
	1939-	H. J. CONNOLLY	

DIRECTORS OF PENNSYLVANIA COAL COMPANY

H. J. CONNOLLY
Clarks Summit, Pa.

G. M. GILLETTE
Du Bois, Pa.

R. H. HARRIS
La Plume, Pa.

R. A. LAMBERT
Scranton, Pa.

FRANK STEMPLER
Scranton, Pa.

